

Lgcs 10. Lecture Notes. Tues 21 Sept 2010.

0. Announcements

- Reminders: Assignment 3 due Thursday, Exam 1 on Tuesday.
- Thursday will be a review day. Bring any questions you have about the first three assignments, and we'll go over the solutions for Swedish, Japanese, and Popoluca from the morphology problems packet.
- Optional reading: Chapter 6 from *Words and Rules*.

1. What to know for the exam, revised:

- How to analyze the morphological structure of a language. This includes:
 - Recognizing types of morphological processes (affixation, ablaut, reduplication, compounding, zero derivation).
 - Determining the conditioning environments for allomorphs. Conditioning environments may be phonologically or semantically defined.
 - Determining the word formation rules for affixes (e.g., *-ful* A→N).
 - Drawing morphological tree structures for complex words. If a word is structurally ambiguous, you should be able to draw distinct tree structures, and identify which meaning goes with which structure.
- The differences between derivational and inflectional morphology.
- Other terminology to know: zero morpheme, portmanteau morpheme, suppletive forms, productivity.

2. Regulars, irregulars, and the structure of the lexicon

Where we're at:

Each speaker's lexicon includes all the roots he or she knows—nouns, verbs, adjectives, and so on—plus the productive derivational and inflectional grammatical morphemes that the speaker knows how to combine with these roots. (p. 74)

So, a speaker's lexicon looks something like the following:

Each morpheme has a lexical entry specifying whatever information about it is not predictable by rule. For root morphemes, this is the morpheme's sound, meaning, and category:

(1) *Lexical entries for roots*

<i>sad</i>	<i>cube</i>	<i>die</i>
sound: [sæd]	sound: [kjʊb]	sound: [daɪ]
meaning: ☹	meaning: ☐	meaning: ♀
category: A	category: N	category: V

Derivational and inflectional morphemes are additionally associated with a word formation rule:

(2) *Derivational morphology*

<i>un-</i>	<i>-able</i>
sound: [ʌn]	sound: [ʌbəl]
meaning: NOT	meaning: ABLE TO BE V'D
category: prefix	category: suffix
rule: A→A	rule: V→A

(3) *Inflectional morphology*

<i>-ed</i>	<i>-s</i>
sound: [d],[t],[əd]	sound: [z],[s],[əz]
meaning: PAST	meaning: PLURAL
category: suffix	category: suffix
rule: V→V _{past}	rule: N→N _{pl}

Derivational morphology derives new words, e.g., *un-love-able*; inflectional morphology puts words in a certain grammatical form, e.g., *die-d*.

Further, derivational morphology appears to operate **before** inflectional morphology, given the contrast between forms like e.g., *weak-ness-es*, **fake-s-er*.

Irregular forms are **not** predictable by rule, and thus **must** be stored in the lexicon: in this case, roots are linked to other roots, e.g. *held* to *hold*, *mice* to *mouse*:

- (4)
- | | | |
|---------------|-------|-----------------------------|
| <i>hold</i> | _____ | <i>held</i> |
| sound: [hold] | | sound: [hɛld] |
| meaning: 𐀀 | | category: V _{past} |
| category: V | | |
|
 | | |
| <i>mouse</i> | _____ | <i>mice</i> |
| sound: [maʊs] | | sound: [maɪs] |
| meaning: | | category: N _{pl} |
| category: N | | |

Note that an irregular inflectional form must take **precedence** over (or **block**) the regular rule, so that, e.g., *held* is used instead of *holded*. If there is no irregular form, the default rule applies: *-ed* combines regularly with any word categorized as V.

We thus have a contrast between irregular and regular inflectional forms: irregular forms must be memorized (and thus stored in the lexicon), while regular forms can be productively generated by rule, and thus **need not** be listed in the lexicon, although they might be, especially if they are frequently used.

This may explain the following contrast: irregulars can appear as the first word of a compound, while regularly inflected past tense forms cannot:

- (5)
- | | | |
|---------------|-----|----------------|
| mice-infested | vs. | *rats infested |
| people-eater | vs. | *babies-eater |

How might this be explained, given the regular-irregular contrast? (See handout from Pinker chapter.)